Tripp Lite
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SmartOnline 60kVA Modular 3-Phase UPS System, On-line Double-Conversion International UPS with Battery

MODEL NUMBER: **SU60KX/26B**

Highlights

- 60,000 VA (60kVA) 3-phase tower UPS w/external battery pack
- N+1 redundant modular architecture helps assure 100% availability
- 1+1 parallel capability allows for system redundancy or increased capacity
- Low THDi reduces installation costs by permitting 1:1 generator sizing
- 3-phase hardwire (220/380V, 230/400V or 240/415V AC, 3-phase, 4-wire + ground, wye) input/output
- IGBT technology and zero transfer time, on-line, double-conversion operation
- Runtime is expandable via additional external battery cabinet options

Applications

- Ideal for protecting mission-critical equipment in computing, networking or telecommunications environments.

Package Includes

- SU60KX UPS System
- BP480V26B External Battery Pack
- PowerAlert Software
- Instruction manual
- Warranty information

Description

Tripp Lite's SU60KX (60kVA) SmartOnline Modular 3-Phase Intelligent, True On-Line UPS System provides 100% system availability with N+1 modular architecture and 1+1 parallel capability. In N+1 configuration, the SU60KX provides three self-contained, redundant 20kVA power modules that can be hot-swapped (load remaining powered) if maintenance is required. In 1+1 configuration , two SU60KX models connected in parallel can provide fail-safe redundancy (two 60kVA models supporting a 60kVA load) or increased capacity (two 60kVA models supporting a 120kVA load).

The SU60KX provides mission-critical equipment with the highest level of power protection available. Large capacity 60,000VA/48,000W UPS continually converts incoming AC power into filtered DC power, and then resynthesizes it back into AC power with a pure sine wave. Perfectly regulated, continuous sine wave output with zero transfer time assures compatibility with all equipment types. High input power factor, advanced IGBT inverter technology and Digital Signal Processor (DSP) technology produce less than 3% input total harmonic distortion (THDi). With low THDi, generators run cooler and last longer, allowing managers to save installation costs by installing a generator with a capacity equal to the equipment load (1:1 ratio). Extremely efficient operation (up to 97%) saves money by lowering electricity consumption. Hardwire input and output connections support a variety of permanent or PDU-style power connections. The SU60KX features 220/380V, 230/400V or 240/415V AC, 3-phase, 4-wire + ground, wye input and output. It also features a wide input voltage correction range: 173-300V/276-477V AC. Frequency is 50 or 60 Hz (auto-selectable). SU60KX power modules are housed in a single small-footprint tower compartment. Included battery modules (Models BP480V26B) are housed in a separate stand-alone hardwired external battery compartment (required for UPS operation/backup battery support). Battery runtime can be extended with additional stand-alone hardwired external battery modules. A manual bypass breaker and an automatic bypass function ensure 100% availability of connected equipment by safely passing through AC power if the UPS requires maintenance. A built-in RS-232 communication port works with included PowerAlert Software to provide shutdown commands and reporting on a single server. An accessory slot accepts an optional internal SNMP card (Model SNMPWEBCARD) for remote shutdowns, reboots and more. Front panel combination LCD/LED display alerts users to a variety of UPS operational modes and conditions. The LCD display includes a real-time event log screen with

up to 500 events listed. A dynamic battery management screen optimizes battery function to lengthen service life and allow cold restart of the UPS during a prolonged blackout to utilize its batteries for periodic system access or data retrieval. An Emergency Power Off button turns the UPS output OFF and disables Bypass output. A built-in Emergency Power Off (EPO) dry-contact interface supports remote emergency shutdown in large facilities.

Features

- N+1 configuration: If maintenance is required, three self-contained, redundant 20kVA power modules can be hot-swapped with the load remaining powered
- 1+1 configuration: Two SU60KX can be connected in parallel to provide either fail-safe redundancy or increased capacity
- High input power factor, advanced IGBT inverter technology and Digital Signal Processor (DSP) technology produce low input total harmonic distortion (THDi)
- Low THDi (less than 3%) reduces installation costs by allowing 1:1 generator sizing
- Extremely efficient operation (up to 97%) saves money by reducing electricity consumption
- True on-line, double-conversion UPS with IGBT technology provides pure sine wave AC output at all times
- Maintains continuous operation with zero transfer time through blackouts, voltage fluctuations and surges
- Removes harmonic distortion, electrical impulses, frequency variations and other hard-to-solve power problems
- 60,000VA/48,000W power capacity with 3-phase, hardwire input/output connections
- Wide input voltage correction range: 173-300V/276-477V AC
- Precision +/-1% output voltage regulation
- Included battery modules (Models BP480V26B) are housed in a separate, stand-alone hardwired external battery compartment (required for UPS operation/backup battery support)
- Battery runtime can be extended with additional stand-alone hardwired external battery modules (Models BP480V26B and BP480V40C; order separately)
- Front panel combination LCD/LED display includes a real-time event log screen with up to 500 events listed
- Dynamic battery management screen optimizes battery function to lengthen service life and allow cold restart of the UPS
- Built-in RS-232 communication port works with included PowerAlert Software to provide shutdown commands and reporting on a single server
- Accessory slot accepts an optional internal SNMP card (Model SNMPWEBCARD) for remote shutdowns, reboots and more
- Emergency Power Off button turns UPS output OFF and disables Bypass output
- Built-in Emergency Power Off (EPO) dry-contact interface supports remote emergency shutdown in large facilities

Specifications

OUTPUT	
Output Volt Amp Capacity (VA)	60000
Output kVA Capacity (kVA)	60
Output Watt Capacity (Watts)	48000
Nominal Output Voltage(s) Supported	220/380V; 230/400V; 240/415V; 3-Phase Wye
Frequency Compatibility	50 / 60 Hz
Output Receptacles	Hardwire
Output AC Waveform (Battery Mode)	Pure Sine wave
Output (VA)	60000
Output (Watts)	48000

Output Nominal Voltage	220/380V, 230/400V or 240/415V AC, 3-phase, 4-wire + ground, wye
Output Voltage Regulation	Maintains pure sine wave output at all times, regulated within 1% of nominal output voltage, with less than 3% total harmonic distortion (using IGBT Inverter)
Output Frequency Regulation	Regulates line frequency at 50 or 60 Hz, +/- .05 Hz
INPUT	
Nominal Input Voltage(s) Supported	220/380V (3ph wye); 230/400V (3ph wye); 240/415V (3ph wye)
UPS Input Connection Type	Hardwire
Recommended Electrical Service	3-Phase Wye, 4 wire (L1, L2, L3, N, G)
Maximum Input Amps	79
Maximum Input Amps Details	73A/76A/79A
Input Connection Type	Hardwire
Input Phase	3-Phase
BATTERY	
Expandable Battery Runtime	Supports extended runtime with additional stand-alone external battery modules: Models BP480V26B and BP480V40C
DC System Voltage (VDC)	+/- 240VDC
Full Load Runtime	5.5 minutes (48,000W) with included BP480V26B battery pack
Half Load Runtime	14 minutes (24,000W) with included BP480V26B battery pack
Battery Pack Accessory (Optional)	External battery modules: Models BP480V26B and BP480V40C
Typical Battery Lifespan	3-6 years, depending on usage
Expandable Runtime	Yes
VOLTAGE REGULATION	
Voltage Regulation Description	On-line, double-conversion process enables UPS to maintain output voltage within +/-1% of nominal voltage at all times
Overvoltage Correction	Maintains continuous operation without using battery power during overvoltages to 276-477V AC (3-phase, 4-wire, wye), reducing output within 1% of nominal
Brownout Correction	Maintains continuous operation without using battery power during brownout/undervoltage conditions to 173-300V AC (3-phase, 4-wire, wye)
USER INTERFACE, ALERTS & CONTROLS	
Front Panel LEDs	Selectable LCD Display: Displays Real-Time Event Log with up to 500 events listed. Also displays a wide range of UPS operational and fault/warning conditions including operational mode, alarm/shutdown conditions, input/output voltage/frequency, battery voltage, load percentage and more. 4-LED Display: Displays normal AC input, on battery power, bypass input and fault conditions
Switches	ON button turns UPS inverter on. OFF button turns UPS inverter off. LCD Display Control Buttons browse through and select items displayed on LCD screen. EPO (Emergency Power Off) button turns UPS output off and disables Bypass output
Audible Alarm	Alarms signal a variety of operational conditions: low battery, overload, shutdown, bypass and more

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Front Panel LCD	No
SURGE / NOISE SUPPRESSION	
UPS AC Suppression Joule Rating	5950
EMI / RFI AC Noise Suppression	Yes
AC Suppression Response Time	Instantaneous
PHYSICAL	
Installation Form Factors Supported with Included Accessories	Tower
Primary Form Factor	Tower
Shipping Dimensions (hwd / in.)	55 x 28.5 x 42.5 (UPS) 55.3 x 28.8 x 42.8 (battery pack)
Shipping Dimensions (hwd / cm)	139.7 x 72.4 x 107.9 (UPS) 124.4 x 73.2 x 108.7 (battery pack)
Shipping Weight (lbs.)	613 (UPS) 1224.75 (battery pack)
Shipping Weight (kg)	278.3 (UPS) 551.1 (battery pack)
Unit Dimensions (hwd / in.)	46 x 20.5 x 33.7 (UPS) 46 x 20.5 x 33.7 (battery pack)
Unit Dimensions (hwd / cm)	116.8 x 52.1 x 85.6 (UPS) 116.8 x 52.1 x 85.6 (battery pack)
Unit Weight (lbs.)	1538
Unit Weight (kg)	694
Cooling Method	Built-in cooling fans
Material of Construction	Steel
Form Factors Supported	Tower
ENVIRONMENTAL	
Storage Temperature Range	+5 to +122 degrees Fahrenheit, -15 to +50 degrees Celsius
Relative Humidity	<90%, non-condensing
AC Mode BTU / Hr. (Full Load)	10509
Operating Temperature	+32 to +104 degrees Fahrenheit, 0 to +40 degrees Celsius
COMMUNICATIONS	
Communications Interface	DB9 Serial; Slot for SNMP/Web interface
Network Monitoring Port	Built-in RS-232 communication port
EPO Port	EPO (emergency power off) interface
SNMP Compatibility	Built-in accessory slot accommodates internal SNMP card (Model SNMPWEBCARD) and other network accessories
LINE / BATTERY TRANSFER	

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Transfer Time (Line Power to Battery Mode)	Zero transfer time: True on-line UPS continuously converts incoming AC to DC, then back to AC. When line power is interrupted, UPS maintains continuous output from battery reserves with absolutely no disruption in output AC power
Low Voltage Transfer to Battery Power	Maintains continuous operation without using battery power during brownout/undervoltage conditions to 173-300V AC (3-phase, 4-wire, wye). Below this point, output is maintained utilizing reserve battery power
High Voltage Transfer to Battery Power	Maintains continuous operation without using battery power during overvoltages to 276-477V AC (3-phase, 4-wire, wye), reducing output within 1% of nominal. Above this point, output is maintained utilizing reserve battery power
SPECIAL FEATURES	
Cold Start	Inverter can be cold-started via the control panel to enable temporary AC output during a power failure
CERTIFICATIONS	
UPS Certifications	CE
Certifications	CE (EN62040-1-1)
WARRANTY	
Product Warranty Period (International)	2-year limited warranty
Product Warranty Period (Mexico)	1-year limited warranty
Product Warranty Period (Puerto Rico)	2-year limited warranty
Optional Coverage	Extended warranties and on-site service contracts available for select opportunities; contact Tripp Lite for details

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